

Triage 101

Time Critical Diagnosis System

May 12, 2009

Missouri Department of
Health and Senior Services

Triage 101

» Triage

- » A process of prioritizing patients based on severity of the presenting condition
- » Can be thought of as a test, tool, or instrument with attached sensitivity, specificity, PPV, and NPV

Triage 101

- » Includes determining
 - » The order and priority of emergency treatment
 - » The order and priority of emergency transport
 - » The transport destination

Triage 101

» Accuracy of Field Triage

» EMS Role-

- » Ascertain nature and severity of “injury”
- » Provide treatment
- » Determine most appropriate destination facility

Triage 101

» Accuracy of Field Triage

» Maximally sensitive triage

- » All patients needing level I or II care triaged to level I or II center
 - » Maximizes PPV of the process

» Maximally Specific Triage

- » No patients that could be treated at level III or IV center triaged to level I or II center
 - » Maximizes NPV of the process

Triage 101

» Accuracy of Field Triage

» Under-triage

- » A patient does not receive the timely, higher level specialized care needed

- » Risk poor patient outcomes

» Over-triage

- » A patient not requiring higher-level care triaged to higher level center

- » Risk consuming resources unnecessarily

Triage 101

» Accuracy of Field Triage

- » Based on interactions between sensitivity, specificity, PPV, and NPV,
 - » Reduction in undertriage accompanied by increases on overtriage
 - » Reduction in overtriage accompanied by increase in undertriage

Triage 101

» Accuracy of Field Triage

- » Due to risks of death and substantial morbidity, trauma systems usually err on side of minimizing under-triage

- » Targets for under-triage: 0 to 5% patients needing Level I or II care
- » Targets for over-triage: varies by system from 25 to 50% patients needing lower level care

Triage 101

- » Economic Benefit of Accurate of Field Triage
 - » Assumption: appropriate destination decisions--> reduction in over- and under-triage
 - » For trauma, accurate field triage one part of complex solution for lowering injury costs

Reference

Centers for Disease Control and Prevention. *Guidelines for Field Triage of Injured Patients. Recommendations of the National Expert Panel on Field Triage.* MMWR 2009; 58 (No. RR-1)